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| 10/789,411              | 02/27/2004  | Siegfried Fichtner   | FICHTNER            | 5262              |
| 20151                   | 7590        | 01/26/2006           |                     | EXAMINER          |
| HENRY M FEIEREISEN, LLC |             |                      |                     | MULLINS, BURTON S |
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

**MAILED**

JAN 26 2006

**GROUP 2800**

Application Number: 10/789,411  
Filing Date: February 27, 2004  
Appellant(s): FICHTNER ET AL.

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Henry M. Feiereisen  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed November 21<sup>st</sup>, 2005 appealing from the Office action mailed June 20<sup>th</sup> 2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

2,421,115                   CARLSON                   5-1947

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Carlson (US 2,421,115). Carlson teaches an electric machine comprising: a shaft 10; and a rotor core mounted onto the shaft and formed of a plurality of stacked laminations 11 (Figs.1&2), said rotor core having opposite end surfaces (Figs.1&2) for attachment of a plate (washers) 13 and 14 in such a manner as to allow an axial deflection of the laminations in the area of the plate (when pressure of a press is released, the pressed-together laminations spring apart and exert a force on the washers, c.3, lines 6-10), the plates 13/14 having a rotor core distal planar outer surface (i.e., the washers are flat, Fig.1&4) and extending to an area of the shaft since they bite into shaft at region 18 (Fig.1; c.3, lines 5-6). Regarding claim 15, the washers have an inner diameter that bears upon or “bites into” the outer diameter of shaft 10 at region 18.

**(10) Response to Argument**

Appellant argues that Carlson's washer 13/14 does not anticipate four features paraphrased in sections (a)-(d). The specific language of claim 1 relevant to each feature is as follows:

- a) "said rotor core having opposite end surfaces for attachment of a plate",
- b) "said rotor core having opposite end surfaces for attachment of a plate in such a manner as to allow an axial deflection of the laminations",
- c) "said plate having a rotor core distal planar outer surface" and
- d) "said plate...extending to an area of the shaft."

With regard to (a), appellant argues that the washers 13/14 are not attached to the end surface of the rotor core but instead are placed against the fiber discs 12 (Carlson, Fig.1, c.2, lines 15-19).

Appellant thus considers only the laminations 11 to be the claimed "rotor core", not the fiber discs. The examiner, however, has considered the fiber discs 12 to be part of the rotor core for several reasons. First, Carlson statement that the core "[comprises] a series of laminations 11 located between fiber discs 12..." (c.2, lines 14-16) does not exclude fiber discs from being part of the rotor core. The fact that the fiber discs 12 lie immediately adjacent to and sandwich the laminations 11, and rotate therewith, suggests the fiber discs can be reasonably interpreted by one of ordinary skill to be part of the rotor core even though they are not laminations, *per se*. Further, the language of claim 1 recites "a rotor core...formed of a plurality of stacked laminations, said rotor core having opposite end surfaces for attachment of a plate". The phrase "formed of" does not exclude other elements which are not laminations from being considered part of the rotor core and attached to a plate. Thus it is reasonable to interpret Carlson's fiber

discs 12 as parts of the rotor core since they form the “opposite end surfaces” of the rotor core, against which the washers or “plates” 13/14 attach.

With regard to (b), appellant argues that Carlson’s washers are designed expressly to dig into the shaft (col. 3, lines 1-6) and thus do not allow axial deflection of the laminations, and that axial deflection is neither intended nor desired by Carlson. In response, the examiner first notes that the claim’s phrase “for attachment of a plate in such a manner as to allow an axial deflection of the laminations in the area of the plate” has been considered a functional limitation. Per MPEP 2173.05(g) the language has been taken to mean simply that the rotor core end surfaces and plate are attached in a manner allowing axial deflections of the laminations in the area of the plate. Carlson meets this function because during manufacture of the rotor, the laminations 11 and fiber discs 12 are placed between the washers 13/14 and the entire assembly is placed in a press where one washer 13 is rigidly supported and the press strikes the second washer 14, thus squeezing the laminations tight together (col.2, lines 45-52). The washers 13/14 are attached to the laminations 11 in this step because of the mechanical contact between the parts. When the pressure of the press compressing the laminations 11 is released, “the laminations having been forced together tend to open up or spring apart and exert force on the washers 13 and 14 in directions tending to move such washers apart” (col.3, lines 6-11). The opening up or springing apart of Carlson’s laminations is thus explicit description of “axial deflection of the laminations” as claimed by applicant. The plates or washers 13/14 attached to the ends of the core allow this function because otherwise Carlson would not have described “the laminations having been forced together tend to open up or spring apart...” The fact that the washers 13/14 dig more into the

shaft when the laminations spring apart does not mean that washers 13/14 do not allow axial deflection of the laminations because the former event (the washers digging into the shaft) is the result of the latter event (the laminations springing apart) and indeed would not occur unless the compressed laminations exerted axial force on the washers 13/14.

Further, the axial deflection in Carlson occurs “in the area of the plate” because the laminations 11 exert a force on the washers 13/14 and hence must necessarily be in the same “area” as the plate and washers. As can be seen in Fig.1, the washers 13/14 are “applied over the respective ends of the shaft” (col.2, lines 43-44) and hence are in the same “area” as the laminations 11 when the laminations spring apart.

With respect to limitation (c), appellant argues that since the washers 13/14 have an initial concavo-convex configuration (col.2, lines 21-27; Fig.3) and are flattened only during attachment onto the shaft (col.3, lines 1-6; Fig.4), they do not comprise a “plate having a rotor core distal planar outer surface”. In response, the examiner argues that various shapes the washers 13/14 have during steps of manufacture are not relevant to the issue of whether Carlson’s apparatus meets the limitations of the apparatus claim language. As seen in Fig.4, the washer 13 has a planar outer surface which contacts a distal end of the rotor core and thus meets the claim limitations. The fact that before attachment to the shaft the washer 13 may comprise a convex shape is not germane to the argument that the product of Carlson meets the limitation.

Finally, with respect to limitation (d), appellant argues that Carlson’s washers are sized to not only rest against the outer shaft surface but in fact are caused to dig into the shaft and therefore

do not “[extend] to an area of the shaft.” The examiner, however, considers the washer 13 to “extend to an area of the shaft” 10 as shown in Fig.1 because the inner radial side of the washer contacts the shaft. From the perspective of the washer’s outer radius, the washer extends radially inward to contact the shaft. Applicant’s paraphrase of the claim language as meaning “the plate can be sized to extend shy of the outer shaft surface, and not necessarily needs to be sized to bear upon the outer shaft surface” is not germane because these limitations are not in the claim.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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